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ABSTRACT

The purpose of this investigation was to determine the relationship between the perceived health threat of various substances and the non-usage of such substances. It was hypothesized that non-usage behavior is related to the perceived health threat of a substance upon the individual. Specifically, non-usage increases as the perceived threat increases. To test the relationship, a mail questionnaire survey of a random sample of the University of Nebraska student body was conducted. Subjects were asked to estimate the perceived health threat to them of a number of health substances ranging from milk to heroin using a five-point scale for each substance. The mean score for each was calculated and a rank order developed. A rank order correlation was then calculated to assess the degree of relationship between the perceived health threat and the pattern of non-usage. A significant relationship in a positive direction was found between perceived threat and non-usage. This finding seems to indicate that the greater the perceived threat, the greater the non-usage behavior for a particular substance. The result suggests that drug education programs which focus on efforts toward increasing the perceived health threat of a particular substance might enhance the possibilities of discontinued usage or continuation of non-usage patterns of such substances. (Author)

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THE RELATIONSHIP BETWEEN THE PERCEIVED THREAT OF VARIOUS SUBSTANCES TO PATTERNS OF NON-USAGE BEHAVIOR - IMPLICATIONS FOR HEALTH EDUCATION

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Introduction

The general problem of drug abuse has been readily evident to most professionals for some time. More recently, this issue has been brought to the widespread awareness of the public. Previously, drug problems have been handled within a legal focus, and through punitive efforts, to the exclusion of alternative measures. Reports of the Joint Committee of the American Bar Association and the AMA have evidenced that punitive efforts, such as prison, have had little effect on the drug problem. [1] As a result of this and similar reports, the former course of focusing on enforcement has been altered somewhat to an alternative which includes an educational program.

Today, one can scarcely pick up a paper without reading of some educational attempt at dealing with drug abuse. In the past several years, numerous programs have been developed in an attempt to reduce the incidence and prevalence of drug abuse behavior. The remedies to this problem have been as many, as diverse, and as multifaceted as the suspected causes, directions, and nature of the problem itself.

Drug abuse programs have been instituted by a multitude of sources. Institutional involvement has taken the form of programs by churches, schools, law enforcement agencies, and government agencies. Additionally, many individuals in diverse roles have been involved in some capacity. Among the more recognizable are clergy members, lawyers and judges, teachers, and law enforcement officials. Others involved would include doctors, ex-users, scientists, parents, friends and fellow students to name but a few.

The efforts by institutions and individuals have been aimed at all groups from grade school children, college students, parents, teachers, law enforcement officials and so forth. The nature of the efforts are as

diverse as the intended audiences. Major methods utilized might encompass lectures, rap sessions, films, pamphlets, seminars, and formal courses. Depending upon the source of the program, the focus may center on pharmacology, psychology, physiology, morality, legality, religion, sensitivity or creativity. In essense numerous institutions, a multitude of diverse participatory roles, methodology and focus have been involved in an attempt to curtail the problem of drug abuse.

Unfortunately, many drug education programs have been developed as a one shot, one way effort aimed at imparting information, instilling or modifying attitudes, and eventually modifying behavior. A few of these programs have made attempts at evaluating the effects of the educational experience, but those have generally focused on the amount of information imparted. The actual presentation format, along with the content of the program are generally dictated by the resources (persons, facilities, materials) available with little or no objective consideration of the impact of the source of the message on the group to be educated.

Fear As A Motive For Health Behavior

In order to reinforce or alter certain behavioral patterns, a number of motivational techniques exist. According to Hochbaum, "One health motive above all others is the most potent and at the same time the least predictive of specific action. That motive is fear."[2] He states that:

> Because fear and anxiety play such an important role in the realm of health and disease, they have received a good deal of attention from physicians and behavioral scientists alike. But the research findings in this area are equivocal, indicating that fear may promote sound health practices in some circumstances and inhibit them in others.[3]

Fear, threat, and anxiety have been utilized in a number of investigations, in an attempt to effect particular health behaviors. Results of such studies have not been conclusive. Undoubtedly, the inconsistencies of such results are in part a result of such variables as sample under investigation, amount of anxiety presented, degree of threat internalized by the subject, and the particular recommended action.

Janis conducted an experiment to test the implications of his earlier study pertaining to the resistance to attitude change by the use of a fear-arousal technique. His findings appeared to support the hypothesis that, "When a relatively high level of fear is induced by the warning presented in a persuasive communication, the recipient will become motivated to develop psychological resistences to the communicator's arguments, conclusions, and recommendations."[4] In another fear-arousing communication study, Radelfinger[5] indicated that neither high nor moderate message was effective in inducing students to obtain tetanus shots. Kegeles,[6] in a study in which adults were the primary subjects, reported that anxiety and fear of pain were negatively correlated with dental visits.

Studies have also shown the positive effect of fear or anxiety-arousing messages. Hafner,[7] in a replication study of the original Janis and Feshbach[8] study, found that subjects of high social status responded better to minimal fear, while the reverse was found for those of lower social status. Levelthal[9] concluded that fear seems to facilitate the acceptance of some behaviors while inhibiting acceptance of others. Actions requiring little effort and supported by appropriate authorities may be initiated by fear, whereas those requiring greater individual initiative are difficult, and prolonged in time, may be inhibited by fear.

Furthermore, Hochbaum[10] has indicated that a particular health act is a function of two interacting variables, namely, perceived susceptibility and perceived benefits. Similar findings have been made by Kegeles.[11] The use of fear as a favorable motivating device has been advanced by Janis who related, "But while it is true that too much fear puts one in a poor position to handle stress, research has begun to make us realize that too little fear can also have bad effects."[12] He also states that "...if no authoritative warnings are given and if other circumstances are such that fear is not aroused beforehand, the normal person will lack the motivation to prepare himself psychologically for danger..."[13]

Purpose of the Study

The purpose of this investigation was to determine the relationship between the perceived threat of various substances and the non-usage of such substances. It was hypothesized that non-usage behavior is related to the perceived threat of a substance upon an individual. Specifically, non-usage increases as the perceived threat increases.

Significance of the Study

There are a large number of agencies and resource people involved in drug abuse education programs. Yet, little is known about the relative effectiveness of such programs. It would appear that drug education efforts might be more beneficial if the messages imparted were based upon motives which are influencial in directing specific behaviors. One such motive is the threat posed to an individual by a particular action.

If a relationship exists between a perceived threat of certain action and resultant behavior, then it seems plausible that such knowledge might enhance the effectiveness of drug related programs.

Methodology

A mail questionnaire was distributed to a ten percent random sample of full time students enrolled at the University of Nebraska at Lincoln. No identifying information was solicited. A total of 824 questionnaire usable forms were returned. This reflected approximately a fifty percent return rate. Due to the exploratory nature of this investigation, no attempt was made to follow up a sample of non-respondents. This is presently being instituted. Thus, an obvious limitation of this study is the distinct possibility that the respondents might represent a self-selective form of bias.

To test the relationship between perceived health threat and drug non-usage, subjects were first asked to estimate the perceived health threat of a number of drug substances using a five point scale for each substance. The scale was as follows: 1) no danger, 2) little danger, 3) some danger, 4) fairly dangerous, and 5) very dangerous. The mean score for each substance was then calculated. A rank order was developed which ranged from high to low perceived health threat. Next, subjects are to be queried as to the extent of non-usage of such drug substances. Substances with high non-usage patterns were assigned lower rankings than those more commonly utilized. A rank order correlation was then calculated to assess the degree of relationship between the perceived health threat of various substances and the pattern of non-usage.

Results

Results of the ranking process and rank order correlation are presented in Table 1. (see table 1)

Table 1

RANK ORDER OF VARIOUS SUBSTANCES IN TERMS OF PERCEIVED HEALTH THREAT AND PATTERN OF NON-USAGE

Substance	Threat (High to Low)	Non-Usage (High to Low)	r*
Opiates	1	1	
LSD	2	2	
Amphetamines	3	4.5	
Barbiurates	4	3	
Mescaline	5	7	
Cigarettes	6	9	
Marijuana	7	10	
Alcohol	8	13	
Sominex	9	4.5	
The Pill	10	11	.78
No Doz	11	8	
Laxatives	12	6	
Aspirin	13	15	
Coca Cola	14	14	
Coffee	15	12	
Milk	16	16	

*Significant at .01 level.

From these results, it appears as if a significant relationship in a positive direction exists between usage and perceived threat. This finding seems to evidence that the greater the perceived threat, the greater the non-usage behavior for a particular substance. Thus, it would appear that drug education programs which focus on cognitive and affective efforts toward increasing the perceived health threat of a particular substance might enhance the possibilities of discontinued usage or continuation of non-usage patterns. On the other hand, drug programs which avoid a conscious direction of increasing an individual's perceived health threat of various substances would appear to be discounting the effect of such a relationship.

Previous studies have indicated that fear or threat can be an extremely destructive form of motivation. At times it can interfere with positive health behavior. However, it can also act as a powerful motive in protecting one from potential threats to one's well being. In summary, the perceived threat of a certain behavior may act as an important determinant of much of our health behavior. This present study has attempted to elucidate further knowledge about the relationship between the perceived threat of a certain action and the resultant behavior.

REFERENCES

1. Drug Addiction, Crime or Disease, Interview and Final Reports of the Joint Committee of the American Bar Association and the American Medical Association on Narcotic Drugs, Indiana University Press, Bloomington, Indiana, 1963

2. Hochbaum, G., An Apple a Day, Trans-Action, November/December, 1966. p. 38.

3. Ibid., p. 39.

4. Janis, I.J., and R. Terwilliger, An Experimental Study of Psychological Resistence to Fear-Arousing Communications, Journal of Abnormal and Social Psychology, Vol. 65, No. 6, 1962.

5. Radelfinger, S.,Some Effects of Fear-Arousing Behavior. Health Education Monographs, No. 19, 1965.

6. Kegeles, S., Some Motives for Seeking Preventive Dental Care, Journal of the American Dental Association, Vol. 67, No. 1, 1963.

7. Haefner, D. Arousing Fear in Dental Health Education, Journal of Public Health Dentistry, Vol. 25, 1965. pp. 140-146.

8. Janis, I. and S. Fesbach, Effects of Fear Arousing Communications, Journal of Abnormal and Social Psychology, Vol. 48, 1953.

9. Leventhal, H. and P. Kafes, The Effectiveness of Fear-Arousing Movies in Motivating Preventive Health Measures, New York State Journal of Medicine, Vol. 63, No. 6, 1963.

10. Hochbaum, G. Public Participation in Medical Screening Programs: A Sociopsychological Study, Public Health Service Publication No. 572, Washington, U.S. Government Printing Office, 1958.

11. Kegeles, S. Some Motives for Seeking Preventive Dental Care, Journal of American Dental Association, Vol. 67, July 1963. pp. 90-98.

12. Janis, I. When Fear is Healthy, Psychology Today, Vol. 1, No. 11, April 1968. p. 46.